ABSTRACT

IMPROVED TURBO DECODER

The present invention relates generally to error-correction coding and, more particularly, to a decoder for concatenated codes, e.g., turbo codes. The present invention provides a decoder for decoding encoded data, the decoder comprising: a processor having an input which receives probability estimates for a block of symbols, and which is arranged to calculates probability estimates for said symbols in a next iterative state; normalising means which normalises said next states estimates; a switch that receives both said normalised and said unnormalised next state estimates, the output of the switch being coupled to the input of the processor; wherein the switch is arranged to switch between the normalised and unnormalised next state estimates depending on the iterative state.

Fig. 8